

REMARKS

Claims 1-11 and 18-31 are remain in this application. Claims 1, 18, 22, and 26-28, the independent claims, have been amended to define still more clearly what Applicant regards as his invention. Claims 12-17 have been canceled without prejudice or disclaimer of subject matter.

Claims 1-17 and 26 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 5,801,781 to Hiroshima et al. in view of U.S. Patent 6,430,198 to Moyal et al.; and Claims 19-21 and 23-25, as being obvious from U.S. Patent 5,598,415 to Nuber et al. in view of Hiroshima et al. Claims 18, 22, and 27-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nuber et al.

First, cancellation of Claims 12-17 renders the rejection of those claims moot.

Since it is believed that the general nature of the invention has been adequately discussed in previous papers, that discussion will not be repeated.

Claim 1 is directed to an information processing apparatus comprising input means, judgment means, and packet generation means. The input means inputs variable length packet data including packet length information indicative of a packet length and encoded information data, and the judgment means judges the packet length of the variable length packet data. The packet generating means generates the variable length packet data into fixed length packet data in accordance with an output of the judgment means, and transmits the fixed length packet data. The packet generating means includes memory means for generating fixed length data, in which the memory means is initialized by writing stuffing data thereinto in advance, and the packet generating means generates the

fixed length data by writing the variable length packet data into the initialized memory means in accordance with the packet length judged by the judgment means.

One important feature of Claim 1 is that the information processing apparatus generates fixed length data by writing variable length packet data into an initialized memory (e.g., RAM 122), the memory having been initialized by writing stuffing data thereinto in advance. See, e.g., page 14, lines 19-21, and page 16, line 18, as well as Fig. 6A, of the present application.^{1/} By virtue of this feature, even if the variable length packet data is too short to fill the fixed length packet, the fixed length packet data can be generated by multiplexing stuffing data of optimum length with the variable length packet data.

Hiroshima et al., as understood by Applicant, relates to conversion of a moving picture stream in MPEG1 to a transport stream according to MPEG2. A demultiplexer receives an MPEG1 system stream obtained by multiplexing encoded data of video and audio, and separates the stream into elementary streams (ES) of video and audio. A packetizer forms packetized elementary streams (PES) of MPEG2. A multiplexer divides the stream into transport packets each having a prefixed length of 188 bytes and, after that, converts the stream to an MPEG2 transport stream (TS). However, Hiroshima et al. fails to teach or suggest using an initialized memory filled with stuffing data to generate fixed length packet data from variable length packet data, as in Claim 1.

^{1/}It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

Moyal et al., as understood by Applicant, relates to reducing the packet length count processing of data packets in a network device. In particular, the Office Action cited Moyal et al. for allegedly teaching generation means for generating identification flag information for discriminating the packet information wherein the identification flag information is not included in the variable length packet data. However, Moyal et al. fails to teach or suggest using an initialized memory filled with stuffing data to generate fixed length packet data from variable length packet data, as in Claim 1.

Nothing in Hiroshima et al. or Moyal et al., either separately or in any permissible combination (if any) teaches or suggests generating fixed length data by writing variable length packet data into an initialized memory, the memory having been initialized by writing stuffing data thereinto in advance, as recited in Claim 1.

Accordingly, Claim 1 is seen to be clearly allowable over Hiroshima et al. and Moyal et al., taken separately or in any permissible combination (if any).

Independent Claim 26 is a method claim corresponding to Claim 1, and is believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

Claim 18 is directed to an information processing apparatus including first generating means for generating variable length packet data including encoded information data; and second generating means for generating and transmitting first fixed length packet data from the variable length packet data generated by the first generating means. The apparatus further includes generating means for generating clock reference information for use in a time reference during decoding of the encoded information data. The second generating means generates second fixed length packet data including the clock reference

information and transmits the second fixed length packet data within a predetermined time interval, and compulsorily transmits the second fixed length packet data when there is no effective first fixed length packet data.

One important feature of Claim 18 is that the information processing apparatus generates second fixed length packet data which includes clock reference information, to be transmitted within a predetermined time interval, and compulsorily transmits the second fixed length packet data when there is no effective first length packet data (e.g., a Transport Stream packet or TS packet). By virtue of this feature, the second fixed length packet data can be transmitted during a time period in which a null packet is transmitted in conventional systems, thereby attaining more efficient transmission of the second fixed length packet data and reducing errors in the transmission.

Number et al., as understood by Applicant, relates to transmission of high rate isochronous data in MPEG-2 data streams. Specifically, Nuber et al. discusses inserting a PCR (Program Clock Reference) into a TS packet as adaptation field data (see column 10, lines 8-10). However, Nuber et al. fails to teach or suggest compulsory transmission of the PCR, as in Claim 18.

Nothing in Nuber et al. teaches or suggests generating second fixed length packet data which includes clock reference information, to be transmitted within a predetermined time interval, and compulsorily transmitting the second fixed length packet data when there is no effective first length packet data, as recited in Claim 18.

Accordingly, Claim 18 is seen to be clearly allowable over Nuber et al.

Independent Claim 27 is a method claim corresponding to Claim 18, and is believed to be patentable for at least the same reasons as discussed above in connection with Claim 18.

Independent Claims 22 and 28 include features similar to those discussed above in connection with Claim 18, though Claims 22 and 28 include generating program specific information indicative of a program specific of the first fixed length packet data, and generating second fixed length packet data including the program specific information. Accordingly, Claims 22 and 28 are believed to be patentable for at least the same reasons as discussed above in connection with Claim 18.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. At the very least, however, cancellation of Claims 12-17 eliminates all issues relating to those claims. In any event, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully

requested. Should the Examiner believe that issues remain outstanding, she is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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